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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/050,489	01/16/2002	Neal Franks	10135.200-US	7696

25908 7590 04/28/2003

NOVOZYMES NORTH AMERICA, INC.
500 FIFTH AVENUE
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NEW YORK, NY 10110

EXAMINER

ALVO, MARC S

ART UNIT	PAPER NUMBER
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1731

DATE MAILED: 04/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

175

Office Action Summary	Application No.	Applicant(s)	
	10/050,489	FRANKS ET AL	
	Examiner	Art Unit	
	Steve Alvo	1731	

- The MAILING DATE of this communication appears on the cover sheet with the correspondence address -
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-10 and 12-27 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-10 and 12-27 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>3</u> . | 6) <input type="checkbox"/> Other: _____ |

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-10, 12-20, 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 96/00811 or Japanese Patent Number 3249291 in view of WO 93/22491 or WO 97/16408.

WO 96/00811 or Japanese Patent Number 3249291 teach pulping waste paper newsprint at a pH between 4 and 8.5 in the presence of a lipase (see WO 96/00811, see page 7, lines 1-11 or Japanese Patent Number 3249291, see abstract) and a surfactant to dislodge and remove ink particles. WO 93/22491 or WO 97/16408 teaches using fatty acid esters as surfactants in the deinking of paper. It would have been obvious to substitute the fatty acid esters of WO 93/22491 or WO 97/16408 for the surfactants of WO 96/00811 or Japanese Patent Number 3249291 as they perform the same function of aiding in the deinking of paper. The claimed fatty acid esters appear to be known surfactants and obvious variants of each other. It would have been obvious to use any fatty acid ester obvious variant for the surfactants of WO 93/22491 or WO 97/16408. The newsprint of WO 96/00811 or Japanese Patent Number 3249291 would include both magazines and newspapers. It would have been obvious to deink newspapers and/or magazines together or separately. It would have been especially obvious to use lipase in combination with an acid acid ester for deinking as such is taught by WO 97/16408. Note that US. Patent

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6,380,410 is being relied on as a translation of WO 97/16408 as they are patent family equivalents.

If the claimed fatty acid esters of claims 12-20 are not obvious variants, then an election of species requirement will be made. Applicant should indicate in any response to this office action whether or not the claimed fatty acid esters are obvious variants. If they are not, then Applicant should elect a single fatty acid ester to be examined.

Claims 21-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 96/00811 or Japanese Patent Number 3249291 in view of WO 93/22491 or WO 97/16408 as applied to claim 1 above, and further in view of ADMITTED PRIOR ART (specification, page 11, line 16 to page 14, line 22).

The ADMITTED PRIOR art teaches that it is known that cellulases and starch degrading enzymes, e.g. amylase, are known to aid in the deinking of old newsprint. It would have been obvious to use the cellulases and starch degrading enzymes of the ADMITTED PRIOR ART, for their known function of aiding the deinking of old newsprint, to aid in the deinking of WO 96/00811 or Japanese Patent Number 3249291.

Claims 1, 3-10, 12-27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 the term "lipase" is misdescriptive. It is not clear if this includes esterases. Page 3 of the specification defines "lipases as including esterase and ferulic acid esterase, EC 3.1.1.2 and EC 3.1.1.1 respectively. Esterases and lipases are both carboxylic ester hydrolases (EC 3.1.1), but an esterase (EC 3.1.1.1, EC 3.1.1.2) is not a lipase (EC 3.1.1.3, EC 3.1.1.34, EC

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3.1.1.23). Does Applicant intend to include the species esterase and ferulic acid esterase in the claims?

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no, however, event will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

When filing an “Official” FAX in Group 1730, please indicate in the Header (upper right) “Official” for papers that are to be entered into the file. The “Official” FAX phone numbers for this TC 1700 are:

Non-Final Fax: (703) 872-9310 **After-Final FAX:** (703) 872-9311.

When filing an “Unofficial” FAX in Group 1730, please indicate in the Header (upper right) “Unofficial” for Draft Documents and other Communications with the PTO that are not for entry into the file of the application. This will expedite processing of your papers. The “Unofficial” FAX phone number for this Art Unit (1731) is: (703) 305-7115.


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Any inquiry concerning this communication or earlier communications from the **primary examiner** should be directed to **Steve Alvo** whose telephone number is **(703) 308-2048**. The Examiner can normally be reached on Monday - Friday from **6:00 AM - 2:30 PM (EST)**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Steve Griffin, can be reached on 703-308-1164.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the **Group receptionist** whose telephone number is **703-308-0661**.

MSA
4/25/2003



STEVE ALVO
PRIMARY EXAMINER
ART UNIT 1731